

Area CITY OF ROCK HILL [18601] [CITY OF ROCK HILL] MANCHESTER GEN 1

Diesel Fuel

No.2 DIESEL FUEL (ULTRALOW SULPHUR) (10000 GAL)

DIAGNOSIS

Recommendation

All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel.

Corrosion

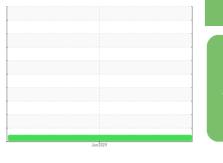
All metal levels are normal indicating no corrosion in the system.

Contaminants

The water content is negligible. There is no bacteria or fungus (yeast and/or mold) indicated in the sample. There is no indication of any contamination in the fuel. The amount and size of particulates present in the system are acceptable.

Fuel Condition

Sulfur value derived by ASTM D5453 method for ULSD validation. Sulfur level is acceptable for ULSD specification.



Sample Rating Trend



NORMAL

| SAMPLE INFORM | ATION | method | limit/base | current | history1 | history2 |
|----------------------------|--------|------------------|------------|-------------|----------|----------|
| Sample Number | | Client Info | | WC06220273 | | |
| Sample Date | | Client Info | | 06 Jun 2024 | | |
| Machine Age | hrs | Client Info | | 0 | | |
| Sample Status | | | | NORMAL | | |
| PHYSICAL PROP | ERTIES | method | limit/base | current | history1 | history2 |
| Fuel Color | text | *Visual Screen | Yllow | Red | | |
| ASTM Color | scalar | *ASTM D1500 | | L4.0 | | |
| Visc @ 40°C | cSt | ASTM D445 | 3.0 | 2.4 | | |
| Pensky-Martens Flash Point | °C | *PMCC Calculated | 52 | 59.8 | | |
| SULFUR CONTEI | NT | method | limit/base | current | history1 | history2 |
| Sulfur | ppm | ASTM D5185m | 10 | 0 | | |
| Sulfur (UVF) | ppm | ASTM D5453 | | 7 | | |
| DISTILLATION | | method | limit/base | current | history1 | history2 |
| Initial Boiling Point | °C | ASTM D86 | 165 | 170 | | |
| 5% Distillation Point | °C | ASTM D86 | | 193 | | |
| 10% Distill Point | °C | ASTM D86 | 201 | 203 | | |
| 15% Distillation Point | °C | ASTM D86 | | 211 | | |
| 20% Distill Point | °C | ASTM D86 | 216 | 219 | | |
| 30% Distill Point | °C | ASTM D86 | 230 | 234 | | |
| 40% Distill Point | °C | ASTM D86 | 243 | 248 | | |
| 50% Distill Point | °C | ASTM D86 | 255 | 262 | | |
| 60% Distill Point | °C | ASTM D86 | 267 | 276 | | |
| 70% Distill Point | °C | ASTM D86 | 280 | 291 | | |
| 80% Distill Point | °C | ASTM D86 | 295 | 307 | | |
| 85% Distillation Point | °C | ASTM D86 | | 318 | | |
| 90% Distill Point | °C | ASTM D86 | 310 | 329 | | |
| 95% Distillation Point | °C | ASTM D86 | | 345 | | |
| Final Boiling Point | °C | ASTM D86 | 341 | 359 | | |
| IGNITION QUALI | ΓY | method | limit/base | current | history1 | history2 |
| API Gravity | | ASTM D7777 | 37.7 | 37 | | |
| Cetane Index | | ASTM D4737 | <40.0 | 49 | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | <1.0 | <1 | | |
| Sodium | ppm | ASTM D5185m | <0.1 | 1 | | |
| Potassium | ppm | ASTM D5185m | <0.1 | <1 | | |
| Water | % | ASTM D6304 | <0.05 | 0.004 | | |
| ppm Water | ppm | ASTM D6304 | <500 | 45 | | |
| % Gasoline | % | *In-House | <0.50 | 0.0 | | |
| % Biodiesel | % | *In-House | <20.0 | 0.0 | | |



FUEL REPORT

ASTM D7647

ASTM D7647 >640

ASTM D7647 >80

ASTM D7647 >20

ASTM D7647 >4

ASTM D7647 >3

ISO 4406 (c) >18/16/13

>2500

FLUID CLEANLINESS

Particles >4µm Particles >6um

Particles >14µm

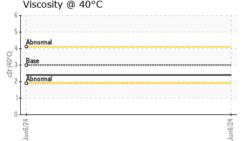
Particles >21µm

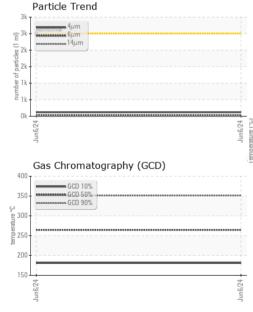
Particles >38µm

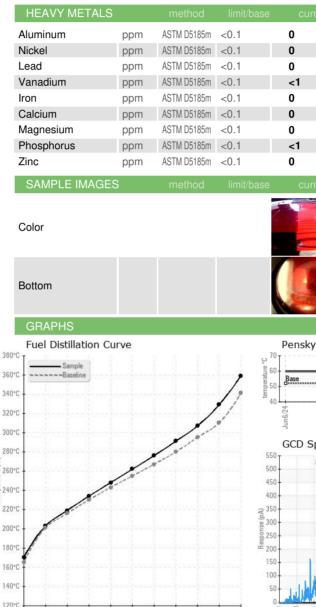
Particles >71µm

Oil Cleanliness

| Particle Coun | it | | | |
|---|-----|-----|-------------------|--|
| 491,520 | | | | T ²⁶ |
| 122,880 | | | | -24 |
| 30,720 Severe | | | | -22 |
| 7,680 Abnormal | | | | -20 |
| 1,920 | | | | -18 |
| 30,720 pevere 7.680 4.00 1,920 480 120 30 | | | | +20 +18 +16 +14 +12 +10 |
| 120 | | | | -14 |
| 30- | | | | -12 |
| 8- | | | | -10 |
| 2- | | | | -8 |
| | | | | |
| 04μ 6μ Water (KF) | 14µ | 21µ | 38 ^j µ | 71µ |
| 0 4μ 6μ Water (KF) 1200 1000 1000 1000 1000 1000 1000 100 | 14μ | 21µ | 38 ^µ | 71µ |
| 04μ 6μ Water (KF) 1200 1000 800 800 400 200 | 14μ | 21µ | 38 [°] µ | |
| 0 4μ 6μ Water (KF) 1200 1000 1000 1000 1000 1000 1000 100 | Τ4μ | 21µ | 38µ | f6 71μ |







no image no image no image no image

120

27

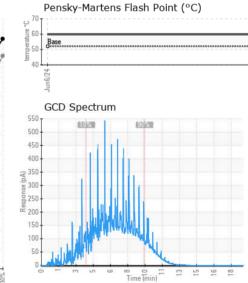
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0

0

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14/12/9





Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 PETROLEUM RECOVERY SERVICES : WC06220273 210 POWELL DR Sample No. Received : 25 Jun 2024 Lab Number : 06220273 Tested : 27 Jun 2024 SUMMERVILLE, SC Unique Number : 11098470 Diagnosed : 28 Jun 2024 - Elizabeth Valachovic Test Package : DF-2 (Additional Tests: Fuel, Screen) Contact: AJAY EL Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. Ajay@prsfuel.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (843)225-1777 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

t Recovered

70% 30% 30%

10%

30% 20%

40% 50%

Report Id: PETSUM [WUSCAR] 06220273 (Generated: 06/30/2024 18:04:38) Rev: 1

Contact/Location: AJAY EL - PETSUM

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